



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

May 18, 2018

Derek J. Robinson, BRAC Environmental Coordinator  
Department of the Navy  
Base Realignment and Closure Program Management Office West  
33000 Nixie Way, Building 50  
San Diego, CA 92147

Re: EPA Comments on the Draft Operation and Maintenance Plan for Parcel B-2, Hunters  
Point Naval Shipyard, San Francisco, California, April 6, 2018

Dear Mr. Robinson:

Attached are EPA's comments on Draft Operation and Maintenance Plan for Parcel B-2, Hunters  
Point Naval Shipyard, San Francisco, California, dated April 6, 2018.

If you have any questions, please do not hesitate to call me at (415) 972-3681 or e-mail me at  
huang.judy@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Judy C. Huang", is positioned below the "Sincerely," text.

Judy C. Huang, P.E.  
Remedial Project Manager

cc:

Nina Bacey, DTSC (via email)  
Tina Low, RWQCB (via email)  
Amy Brownell, SFDPH (via email)  
Sharon Ohanessian, Army (via email)

**Review of the Draft Operation and Maintenance Plan for Parcel B-2,  
Hunters Point Naval Shipyard, San Francisco, California, April 2018**

**GENERAL COMMENTS**

1. The Draft Operation and Maintenance Plan for Parcel B-2, Hunters Point Naval Shipyard, San Francisco, California, April 2018 (the Draft O&M Plan) includes several statements regarding cracking of the durable cover such as “excessive cracking,” “expansion of cracks,” “cracking is extensive,” “light cracking,” and “large cracks;” however, these terms are not defined. It should be noted that Section 1.5 (Definitions) of Section 03 30 00 (Concrete) of Attachment 2 (Repair and Maintenance Specifications) defines cracks using widths less than 1/4-inch, between 1/4-inch and 3/4-inch, and cracks greater than 3/4-inch. Similarly, Section 3.1 (Preparation of Cracks) of Section 32 01 17.16-4 (Sealing of Cracks and Potholes in Bituminous Pavements) of Attachment 2 defines hairline, small, medium, and large cracks. Please revise the Draft O&M Plan to define the terms used to describe cracking of the durable cover.
2. The Draft O&M Plan does not discuss how materials associated with operations and maintenance (O&M) activities will be managed and disposed. For example, Section 2.4.1.2 (Maintenance of Shoreline Revetment) indicates that nuisance vegetation along the revetment will be removed if present. Similarly, Section 2.4.2.2 (Maintenance of Asphalt Pavement and Building Foundations) indicates that accumulated wind-blown soil and debris will be removed when they “restrict an adequate inspection process.” However, the Draft O&M Plan does not discuss how the debris and removed sediment will be managed and disposed. Please revise the Draft O&M Plan to clarify how materials associated with O&M activities will be managed and disposed.
3. Table 3 (Emergency Responses) indicates that the O&M contractor may determine the appropriate trigger for inspection and emergency response from eight information resources; however, it is unclear why these information resources are not discussed in Section 4 (Emergency Response Plan). Please revise the text of the Draft O&M Plan to discuss the information resources that would provide information that would trigger emergency response procedures.
4. Section 4 (Emergency Response Plan) and Table 3 (Emergency Responses) do not include a significant wave or extreme tide (100-year return period) as a potential emergency requiring response procedures. Given the location of Parcel B-2, please revise the Draft O&M Plan to include a significant wave or extreme tide as a potential emergency.

**SPECIFIC COMMENTS**

1. **Section 1.1.4.2, Sediment, Page 1-5:** The last sentence of Section 1.1.4.2 states, “Elevated concentrations of metals, including arsenic and manganese, are likely attributable to naturally occurring metals in the bedrock fill quarried to build the shipyard in the 1940s;” however, information to support this statement is not provided and/or

referenced. Further, the Final Hunters Point Shipyard Parcel F Validation Study Report indicates that there are elevated levels of lead, mercury, and copper in sediment off the shoreline of Site IR-26. Please revise Section 1.1.4.2 to acknowledge that there is metals contamination in sediment or provide and/or reference information to substantiate that the elevated concentrations of metals in the sediment along the exposed shoreline of Parcel B-2 are attributable to naturally occurring metals in the bedrock fill quarried to build the shipyard in the 1940s.

2. **Figure 4, Remedial Action Overview for Parcel B-2:** Based on Figure 4, asphalt or concrete cover is present throughout Parcel B-2; however, the Draft O&M Plan does not distinguish where asphalt cover sections and concrete cover sections exist. In addition, Figure 6 (Typical Asphalt Pavement Cover Cross Section) and Drawing C6 (As-Built Drawings, Cover Component, Drainage Channel, Sign, and Settlement Monument Details) only includes a typical asphalt pavement cover cross section and components detail, respectively. Please revise the Draft O&M Plan to distinguish where asphalt cover sections and concrete cover sections exist. In addition, please revise the Draft O&M Plan to include a typical concrete cover cross section and components details.
3. **Section 2.4.1.1, Inspection of Shoreline Revetment, Page 2-5:** Section 2.4.1.1 indicates that the crest of the shoreline revetment will be inspected and the original elevation will be maintained; however, it is unclear how maintaining the original elevation can be verified during the annual inspection of the crest of the shoreline revetment. This is of particular concern given that the one settlement monument installed on the asphalt pavement cover will only be surveyed every five years. Please revise the Draft O&M Plan to clarify how the shoreline revetment will be inspected and the original elevation will be maintained through the use of annual visual inspection and surveying a single monument every five years.
4. **Section 2.4.1.3, Repair of Shoreline Revetment, Page 2-5:** The text states, “Any missing stones or gaps caused by settlement on the revetment face will be promptly replaced with appropriately sized stones;” however, the text does not clarify what constitutes “appropriately sized stones.” Please revise Section 2.4.1.3 to reference the size(s) of stones that will be utilized to address missing stones or gaps caused by settlement on the revetment face.
5. **Section 2.4.1.3, Repair of Shoreline Revetment, Page 2-5:** The text indicates that areas of undercutting at the toe of the structure will be monitored and repaired when the integrity of the structure could be compromised; however, the specific decision criteria that will be utilized to determine that the integrity of the structure could be compromised are not provided and/or referenced. It should be noted that the Annual Report Forms in Appendix A (Annual Report Forms) do not provide specific criteria. Please revise the Draft O&M Plan to provide the specific decision criteria that will be utilized to determine whether the integrity of the structure could be compromised.
6. **Section 2.4.2, Asphalt Pavement Cover and Building Foundations, Page 2-6:** The text states, “Settlement and subsidence are not an immediate concern but will be monitored over time and repaired if water accumulation is or becomes persistent;”

however, it is unclear how it will be known that water accumulation is or becomes persistent when annual inspections are proposed. This is of particular note given that Section 4 (Emergency Response Plan) does not include inspection for ponding after a significant rainstorm event. Please revise Section 2.4.2 to clarify how it will be known that water accumulation is or becomes persistent given the frequency of inspections proposed. In addition, please clarify why inspections for ponding after a significant rainstorm event are not specified.

7. **Appendix A, Annual Report Forms, Page A-12:** Additional details are needed to ensure that the inspection of buildings is sufficient. The Asphalt Pavement Cover and Building Foundation subsection states, "Maintain buildings in a locked and inaccessible condition. If unauthorized access to the buildings is noted, repair entry points as needed to prevent further access. Use new locks or other physical controls as needed;" however, it is unclear from Appendix A which buildings are covered under this Draft O&M Plan. Further, it is unclear if the form in Appendix A sufficiently addresses the building inspections as only two inspection items related to the buildings are included. Please revise Appendix A to list the buildings located in Parcel B-2 that are covered under this Draft O&M Plan. In addition, please revise the form in Appendix A to include sufficient inspection items related to the buildings.